

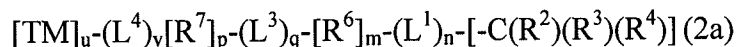
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-55. (cancelled).

Claim 56. (currently amended): ~~The lipid according to Claim 55, wherein said A lipid is represented by formula (2a):~~



wherein:

TM is an antibody or an antigen binding fragment or derivative thereof,

-u is an integer 1 or 2,

-L⁴ is -(Alk¹)_r(X¹)_s(Alk²)_t,

wherein X¹ is an -O- atom; a -S- atom; -C(O)-; -C(O)O-; -C(S)-; -S(O); -S(O)₂-; -N(R⁵)-; -CON(R⁵)-; -OC(O)N(R⁵)-; -CSN(R⁵)-; -N(R⁵)CO-; N(R⁵)C(O)O-; -N(R⁵)CS-; -S(O)N(R⁵)-; -S(O)₂N(R⁵)-; -N(R⁵)S(O)-; -N(R⁵)S(O)₂-; -N(R⁵)CON(R⁵)-; or -N(R⁵)SO₂N(R⁵)-,

wherein R⁵ is a hydrogen atom, a straight or branched alkyl group or an -Alk¹X¹- chain;

wherein in any of the groups containing two R⁵ substituents each R⁵ may be the same or different;

wherein Alk¹ and Alk², which may be the same or different, is each an optionally substituted straight or branched C₁₋₁₀alkylene, C₂₋₁₀alkenylene or C₂₋₁₀alkynylene chain optionally interrupted or terminated by at least one carbocyclic or heterocarbocyclic groups and/or heteroatoms or heteroatom containing groups X¹; and

r, s, and t, which may be the same or different, is each zero or the integer 1, provided that when one of r, s or t is zero, at least one of the remainder is the integer 1,

-v is zero or the integer 1,

-L¹ is -X¹Alk²- or -[X¹]₂Alk¹X¹Alk²-,

wherein X¹ is an -O- atom; a -S- atom; -C(0)-; -C(0)O-; -C(S)-; -S(0); -S(O)₂-; -N(R⁵)-; -CON(R⁵)-; -OC(O)N(R⁵)-; -CSN(R⁵)-; -N(R⁵)CO-; N(R⁵)C(0)O-; -N(R⁵)CS-; -S(O)N(R⁵)-; -S(O)₂N(R⁵)-; -N(R⁵)S(0)-; -N(R⁵)S(O)₂-; -N(R⁵)CON(R⁵)-; or -N(R⁵)SO₂N(R⁵)-;

wherein R⁵ is a hydrogen atom, a straight or branched alkyl group or an -Alk¹X¹- chain,

wherein in any of the groups containing two R⁵ substituents each R⁵ may be the same or different;

wherein Alk¹ and Alk², which may be the same or different, is each an optionally substituted straight or branched C₁₋₆alkylene, C₂₋₆alkenylene or C₂₋₆alkynylene chain optionally interrupted or terminated by at least one carbocyclic or heterocarbocyclic groups and/or heteroatoms or heteroatom containing groups X¹,

-m is an integer of from 1 to 6,

-and n is zero or the integer 1-are as defined for formula (2);

R⁷ is a hydrophilic hydrocarbon containing at least two atoms or groups capable of being solvated by water;

p is an integer of from 1 to 6;

L³ is a linker atom or group -X¹-, -X¹Alk¹X¹- or [X¹Alk¹]₁X¹Alk²X¹,

wherein X¹ is an -O- atom; a -S- atom; -C(0)-; -C(0)O-; -C(S)-; -S(0); -S(O)₂-; -N(R⁵)-; -CON(R⁵)-; -OC(O)N(R⁵)-; -CSN(R⁵)-; -N(R⁵)CO-; N(R⁵)C(0)O-; -N(R⁵)CS-; -S(O)N(R⁵)-; -S(O)₂N(R⁵)-; -N(R⁵)S(0)-; -N(R⁵)S(O)₂-; -N(R⁵)CON(R⁵)-; or -N(R⁵)SO₂N(R⁵)- group;

wherein R^5 is a hydrogen atom, a straight or branched alkyl group or an $-Alk^1X^1-$ chain;

wherein in any of the groups containing two R^5 substituents each R^5 may be the same or different;

wherein Alk^1 and Alk^2 , which may be the same or different, is each an optionally substituted straight or branched C_{1-6} alkylene, C_{2-6} alkenylene or C_{2-6} alkynylene chain optionally interrupted or terminated by at least one carbocyclic or heterocarbocyclic groups and/or heteroatoms or heteroatom containing groups X^1 ;

q is zero or an integer of from 1 to 6;

R^6 is a hydrocarbon chain;

R^2 is a hydrogen atom or an optionally substituted aliphatic, cycloaliphatic, heteroaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group optionally containing one or more cationic centers; and

R^3 and R^4 , which may be the same or different, is each an optionally substituted aliphatic, cycloaliphatic, heteroaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group containing one of more cationic centers or R^3 and R^4 together with the carbon atom to which they are attached form a cycloaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group containing two or more cationic centers.

Claim 57. (canceled).

Claim 58. (previously presented): The lipid according to Claim 56, wherein u is the integer 1.

Claim 59. (currently amended): The lipid according to Claim 56, wherein:

v is the integer 1; and

L^4 is ~~$(Alk^1)_r(X^1)_s(Alk^2)_t$~~ ;

wherein X^1 is an ~~O atom; a S atom; C(0); C(0)O; C(S); S(0); S(0)₂; N(R⁵);~~
~~CON(R⁵); OC(0)N(R⁵); CSN(R⁵); N(R⁵)CO; N(R⁵)C(0)O; N(R⁵)CS; S(O)N(R⁵);~~
~~S(0)₂N(R⁵); N(R⁵)S(0); N(R⁵)S(O)₂; N(R⁵)CON(R⁵); or N(R⁵)SO₂N(R⁵);~~

wherein R^5 is a hydrogen atom, a straight or branched alkyl group or an ~~Alk^1X^1~~ chain;

wherein in any of the groups containing two R^5 substituents each R^5 may be the same or different;

wherein ~~Alk^1 and Alk^2~~ , which may be the same or different, is each an optionally substituted straight or branched ~~C_{1-10} alkylene, C_{2-10} alkenylene or C_{2-10} alkynylene chain~~ optionally interrupted or terminated by at least one carbocyclic or heterocarbocyclic groups and/or heteroatoms or heteroatom containing groups X^1 ; and

r, s, and t, which may be the same or different, is each zero or the integer 1, provided that when one of r, s or t is zero, at least one of the remainder is the integer 1.

Claim 60. (currently amended): The lipid according to Claim ~~59~~56, wherein L^4 is an ~~$NHCO(Alk^2)_t$~~ group.

Claim 61. (previously presented): The lipid according to Claim 56, wherein R^2 is a hydrogen atom; and R^3 and R^4 are each $Sp^1[WSp^2]_bWSp^3$ or $-Sp^1[WSp^2]_bWH$, wherein Sp^1 , Sp^2 and Sp^3 , which may be the same or different, is each a spacer group, W is a cationic center and b is zero or an integer from 1 to 6.

Claim 62. (previously presented): The lipid according to Claim 61, wherein Sp^1 , Sp^2 and Sp^3 is each an optionally substituted aliphatic, cycloaliphatic, heteroaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group.

Claim 63. (previously presented): The lipid according to Claim 62, wherein Sp^1 , Sp^2 and Sp^3 is each an optionally substituted C_{1-6} alkylene chain.

Claim 64. (previously presented): The lipid according to Claim 61, wherein W is a -NH- group.

Claim 65. (previously presented) The lipid according to Claim 61, wherein b is an integer of from 1 to 3.

Claim 66. (previously presented): The lipid according to Claim 56, wherein $-C(R^2)(R^3)(R^4)$ is $-CH[Sp^1NHSp^2NH_2]_2$, $-CH[Sp^1NHSp^2NHSp^2NH_2]_2$ or $-CH[Sp^1NHSp^2NHSp^2NHCH_3]_2$, wherein Sp^1 is $-CH_2-$ and each Sp^2 is $-(CH_2)_3-$ or $-(CH_2)_4-$.

Claim 67. (previously presented): The lipid according to Claim 56, wherein n in $-(L^1)_n-$ is the integer 1.

Claim 68. (canceled).

Claim 69. (currently amended): The lipid according to Claim ~~68~~67, wherein X^1 is a -CONH- group, Alk^1 is a $-CH_2-CH_2$ chain and Alk^2 is a $-(CH_2)_4$ - chain, $-(CH_2)_5$ - chain or $-(CH_2)_6$ - chain.

Claim 70. (previously presented): The lipid according to Claim 56, wherein m is an integer 1 or 2.

Claim 71. (previously presented): The lipid according to Claim 56, wherein R^6 is an optionally substituted C_{10-60} aliphatic chain.

Claim 72. (previously presented): The lipid according to Claim 71, wherein R^6 is a linear, optionally substituted C_{16-38} alkylene chain.

Claim 73. (previously presented): The lipid according to Claim 56, wherein q is the integer 1 and p is the integer 1 or 2.

Claim 74. (canceled).

Claim 75. (currently amended): The lipid according to Claim ~~74~~56, wherein L^3 is a -NHC0-, -CONH-, -CONH(CH₂)₂NHCO-, or -[CONH(CH₂)₂]₂NCO(CH₂)₂CONH group.

Claim 76. (previously presented): The lipid according to Claim 56, wherein R^7 is a synthetic or naturally occurring polyol or a poly(alkylene oxide) or a derivative thereof.

Claim 77. (previously presented): The lipid according to Claim 76, wherein R⁷ is a poly(alkylene oxide) or a derivative thereof.

Claim 78. (previously presented): The lipid according to Claim 77, wherein R⁷ is a poly(ethylene oxide).

Claim 79. (previously presented): The lipid according to Claim 59, wherein R⁵ is a methyl or ethyl group.

Claim 80. (currently amended): The lipid according to Claim ~~68~~67, wherein R⁵ is a methyl or ethyl group.

Claim 81. (currently amended): The lipid according to Claim ~~74~~56, wherein R⁵ is a methyl or ethyl group.